Question #6 submitted by committee member Lott:

6) What assurance can the hospital and surgical centers offer the public that proper infection control has been followed if the people, surgical technologist, have no requirements for education or licensure?

Surgical technologists are the experts of sterile technique that is utilized during surgical procedures to prevent surgical site infections. Setting minimum education and competency standards for all surgical technologists in the state through the creation of a license is the best way to assure the public that proper infection control is provided to every surgical patient.

The Minnesota Adverse Health Events Reporting Act requires public dissemination by healthcare facilities of 28 adverse medical events. **Analysis of the data from 2009-2013, by facility, reveals that reported adverse surgical events (wrong body part, wrong procedure, wrong patient, foreign retained objects) occurred 40% less often in hospitals that require education and certification for surgical technologists compared to hospitals that do not require education or certification for surgical technologists.**

The surgical technologist is the professional near the patient responsible for counting supplies and instruments to prevent foreign retained objects. **Foreign retained objects analyzed separately occurred 55% less in hospitals that require surgical technologist education and certification compared to hospitals that do not.**

Data were calculated using relative increase. Because of the confidentiality of root cause analyses of these events, it is difficult to determine exact fault. Nevertheless, the data decisively show that healthcare facilities that value competency in their surgical staffs experienced better outcomes.

Data source: http://www.health.state.mn.us/patientsafety/

Data from Virginia demonstrates the cost of medical care related to extended hospital stays occasioned by a surgical site infection. The data are not specific to surgical site infections directly caused by a surgical technologist (uncertified or otherwise), but the data reveal that facilities utilizing only credentialed personnel as surgical technologists (who are the practitioners primarily responsible for maintaining the sterile field and preventing breaks in aseptic technique) reduced by 11% the costs associated with extended stays due to surgical site infection.

Source: vapricepoint.org, January 2007 – September 2007

The Journal of the American Medical Association released a meta-analysis on US health care costs related to healthcare-associated infections. The original investigation was conducted on September 23, 2013. This meta-analysis estimates costs of significant and targetable Hospital Acquired Infections. The average Surgical Site Infection cost in this study was found to be $20,785 per infection and concludes that that total annual costs in the US for 5 major healthcare associated infections was $9.8 billion. The 5 major infections included in this study were central line bloodstream associated infections, ventilator associated pneumonia, surgical site infections, Clostridium difficile infections and catheter associated urinary tract infections. Surgical site infections contributed the most accounting for 33.7% of the overall cost for a price tag of approximately $3.3 billion.

A recent study from the Journal of Patient Safety released in 2013 titled “A New, Evidence-based Estimate of Patient Harms Associated with Hospital Care” finds that premature deaths associated with preventable adverse events add up to an estimated 440,000 hospital patient deaths per year. The study states 440,000 equals 1/6th of all deaths occurring in the United States each year.

The public deserves to be protected from untrained individuals who can increase the risk of surgical patients experiencing preventable adverse events. The best way to do this is to establish a license for surgical technologists to ensure that a minimum education and competency standard is created and enforced on a consistent basis. Every patient deserves a Certified Surgical Technologist.